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Environment statistics

Environment statistics

Report of the Secretary-General

Summary

The present report presents recent recommendations on environment statistics of the Statistical Commission, its Working Group on International Statistical Programmes and Coordination, and the Administrative Committee on Coordination (ACC) Subcommittee on Statistical Activities, as well as the note drafted by the United Nations Statistics Division on environment statistics coordination (see annex I) and circulated to Subcommittee members for their comments in preparation for a Subcommittee session on that topic.

In response to a request of the ACC Subcommittee on Statistical Activities, this report also describes the nature, scope and sources of environment statistics and gives an overview of the methodological and data compilation work of various international organizations (see annex II). The conclusion is that the large variety of user needs justifies the diversity of approaches in this relatively new area of statistics, and efforts aiming at full harmonization and standardization are therefore deemed premature.

* E/CN.3/1999/1.

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I. Recommendations by the Statistical Commission, its Working Group on International Statistical Programmes and Coordination, and the Administrative Committee on Coordination (ACC) Subcommittee on Statistical Activities

1. The Statistical Commission, at its twenty-ninth session (11–14 February 1997):[1]

(a) Stressed that the future work of the Task Force on Environment Statistics should focus on improved coordination of its programmes and activities;

(b) Considered basic environment statistics to be of the highest priority, followed by environmental indicators and accounting;

(c) Stressed the need to develop linkage between environmental indicators and environmental accounting;

(d) Welcomed the proposal by the United Nations Statistics Division to collaborate with the London Group on Resource Accounting on the revision of the System of integrated Environmental and Economic Accounting (SEEA).

2. The Working Group on International Statistical Programmes and Coordination, at its nineteenth session (10–12 February 1998), endorsed the proposed first international compilation of environmental indicators, and encouraged national statistical services and international organizations to fully participate in that exercise (E/CN.3/1999/20, para. 6).

3. The Administrative Committee on Coordination (ACC) Subcommittee on Statistical Activities, at its thirty-first session (16–18 September 1997), considered that there was a special need for coordination in environment statistics and requested its Bureau to prepare for a session on that topic at the thirty-second session of the Subcommittee (E/CN.3/1999/21, para 14). The Bureau agreed that the Secretariat should set out to solicit the views of its members on issues of coordination in environment statistics. In response, the United Nations Statistics Division drafted a note entitled "Coordination of environment statistics: problems, actions and expected results" (see annex I) and circulated it to ACC Subcommittee members for their comments.

4. At its thirty-second (16–18 June 1998), the ACC Subcommittee concluded (E/CN.3/1999/22, paras. 11 and 12) that:

(a) Basic environment statistics was a generic term that needed to be clarified;

(b) In some parts of this area, there had been positive progress, including the work of the United Nations and the Organisation for Economic Cooperation and Development (OECD) on environmental indicators, and the development of environmental accounting through the London Group on environmental accounting. However, many other parts of environment statistics were still immature, that is to say, were more like a scientific development area;

(c) There was too much concentration on a supply-driven statistical base, and the demand side needed to be better articulated;

(d) The Task Force on Environment Statistics was no longer necessary, and sufficient coordination could be undertaken in the Subcommittee itself;

(e) The United Nations Statistical Division should coordinate, in collaboration with OECD, the Statistical Office of the European Communities (Eurostat), the United Nations Environment Programme (UNEP), the World Bank and the Division for Sustainable Development of the United Nations Secretariat, the preparation of a paper on these issues for the Statistical Commission, outlining, *inter alia*, the nature of environment statistics, methodological work and international data collection and coordination.

5. In response to the Subcommittee's request set out in paragraph 4 (e) above, the Secretariat prepared a paper that describes the nature, sources and scope of environment statistics; and also gives an overview of the methodological and data compilation work carried out by the above-mentioned organizations (see annex II).

II. Points for discussion

6. The Statistical Commission may wish to:

(a) Comment on the work programmes of international agencies as indicated in annex II of the present report;

(b) Consider the suggestion of the ACC Subcommittee on Statistical Activities, at its thirty-second session, that the Task Force on Environment Statistics was no longer necessary and that sufficient coordination could be undertaken in the Subcommittee itself.

The above points for discussion are also set out in paragraph 16 of annex II.

Notes

[1] *Official Records of the Economic and Social Council, 1997, Supplement No. 4* (E/1997/24), para. 23.

Annex I

Coordination of environment statistics: problems, actions and expected results

(Note by the United Nations Statistics Division to the ACC Subcommittee on Statistical Activities at its thirty-second session (16–18 June 1998))

Problems

1. In the area of *environmental statistics and indicators*, various frameworks have emerged such as the Pressure-State-Response Framework for environmental indicators Organisation for Economic Cooperation and Development (OECD), the Driving Force-State-Response Framework for indicators of sustainable development (Division for Sustainable Development of the Department of Economic and Social Affairs of the United Nations Secretariat) and the Framework for the Development of Environment Statistics (United Nations Statistics Division). As a result, different lists of indicators have been advanced, reflecting differences in approaches and priorities of data users and producers.

2. Similar problems can be observed in the area of *integrated environmental and economic accounting* where different systems and methodologies have been advocated by different organizations and countries. They include, in particular, the United Nations system of integrated Environmental and Economic Accounting (SEEA), the Netherlands National Accounting Matrix including Environmental Accounts (NAMEA) promoted by the Statistical Office of the European Communities (Eurostat), Material Flows Accounts (World Resources Institute (WRI) and Eurostat) and a "neoclassical" approach to environmental accounting (Peskin). The consistency of these approaches with the 1993 System of National Accounts SNA[a] and its environmental satellite accounts varies widely.

3. The multitude of approaches is in response to users' need for information for integrative policy-making in the relatively new field of environment and development. There are now no internationally adopted recommendations on the concepts and methods of environment statistics, with most methodological reports having, still, more of an experimental and technical nature. Data users, to satisfy short-term data needs, develop their own frameworks and wish-lists of indicators which are seldom coordinated among themselves or with existing statistical systems.

4. *Compilations of environmental indicators* by international organizations (the United Nations Environment Programme (UNEP), OECD, the Division for Sustainable Development of the Department of Economic and Social Affairs, Eurostat, the World Bank, WRI and the Food and Agriculture Organization of the United Nations (FAO)) often yield uneven results in terms of quality and comparability, depending on the approaches, priorities and data sources. Moreover, *compound indices* have been compiled largely outside any established data system or framework, with sometimes arbitrary and differing assumptions about scope, coverage and indicator weighting. Examples are the Genuine Progress Indicator (Cobb, Halstead), Natural Wealth and Genuine Savings (World Bank) and the Total Material Requirement (WRI).

5. In the absence of agreed international methodologies, national and international organizations are thus actively promoting different approaches at national and international levels, sometimes in the same countries and regions. The consequences are often duplication of work and confusion about the pros and cons of the different indicators, indices and accounting systems proposed.

Proposed actions

6. Given the different mandates and priorities of international organizations and the still experimental nature of concepts and methods, it is unlikely that an agreement can be reached in the short term. The following suggested actions represent the initial views of the United Nations Statistics Division on steps towards improved coordination, identification of commonalities and long-term harmonization of methodologies and data compilation; and they are put forth to stimulate the discussion on the coordination problems mentioned above:

(a) Organize ad hoc meeting of the Task Force on Environment Statistics (United Nations Statistics Division, 1999) to:

(i) Discuss commonalities, differences and priorities of data producers in order to agree, as far as possible, on a common work programme and follow-up meetings;

(ii) Agree on data sharing, including the United Nations Statistics Division survey of environmental indicators;

(b) Take steps towards harmonization of different concepts and methods of environment statistics through:

(i) SEEA review/revision process (London Group, Nairobi Group, Task Force);

(ii) Intergovernmental Working Group on the Advancement of Environment Statistics (IGWG) meeting on the development and compilation of environmental indicators (host country, United Nations Statistics Division, year 2000);

(iii) Joint work on selected environmental issues, for example, operational manual (Nairobi Group), report on forestry accounting (FAO, United Nations Statistics Division, Eurostat, World Bank), guidelines on fishery accounting (FAO, United Nations Statistics Division, United Nations University (UNU)), collaboration with OECD on United Nations Statistics Division survey on environmental indicators;

(c) Disseminate methodological developments/ guidelines through the World Wide Web;

(d) Organize regional workshops on environmental statistics and accounting in cooperation with the regional commissions and collaborate with international statistical training institutes in the development of courses in environment statistics;

(e) Create regional groups to share experiences on methodological and operational issues (regional commissions and countries, for example, in the planned Manila Group (1998)).

Expected results

7. The following are United Nations Statistics Division views on expected results within one or two years, based on the suggested actions:

(a) OECD-United Nations Statistics Division joint survey of environmental indicators (1999);

(b) Agreement on data provision and exchange between agencies and organizations (Task Force, 1999);

(c) Agreement on a common environmental accounting framework with different modules (London Group, 1999);

(d) Agreement on the treatment of depletion in environmental accounting (London Group, 1999);

(e) Evaluation and revision of the survey on environmental indicators (IGWG, 2000);

(f) Implementation of international methodologies presented at regional workshops and training seminars (ongoing).

Notes

[a] United Nations publication, Sales No. E.94.XVII.4.

Annex II

Environment statistics: concepts, methods and international work

Nature, scope and coverage of environment statistics

1. Environment statistics, despite its almost 30-year history, remains a relatively new and developing area of statistics. To a great extent, it depends on evolving scientific knowledge about the interrelationships between humans and their environment. The aim of environment statistics is to describe and measure the harmful environmental impact of human activities, as well as those activities that protect or improve the environment. Relating these data to information on the state of the environment (quality and quantity) and flora and fauna provides insight into the health of ecosystems and human well-being. The main objective of environment statistics is to bring together environmental and socio-economic data in order to provide a better picture of the interaction between human activity and nature and its ultimate effects on human health and welfare.

2. Environment statistics are diverse in terms of their sources, and they range from pertinent social and economic statistics to the results of laboratory analyses at monitoring stations and field observations made by natural scientists. A great many methods are used in the compilation of these data. The role of environment statistics is to provide a synthetic presentation of these data that will aid in the formulation of environmental policies, their integration into social and economic policies and the evaluation of the success or failure of these policies. Most international work in this field has evolved around three major areas: (a) frameworks and specification of basic environment statistics, (b) environmental indicators and (c) environmental accounting.

3. *Basic environment statistics* include statistical variables that describe the state of and trends in the environment, and the social and economic activities that affect it. Human activities may deplete natural resources through overuse in production and consumption; they may also overload natural systems with wastes and pollutants, creating considerable hazards to the health and well-being of humans and other living things. The United Nations *A Framework for the Development of Environment Statistics* (FDES)[a] attempts to capture the sequence of human activities, their impacts on the different media of the natural environment (air/climate, water, land/soil) and the biota in them, and on human settlements, as well as social responses to these impacts. Statistical variables such as the use of natural resources, emissions of pollutants, loading and concentrations of discharges and environmental protection expenditures can be organized under the FDES categories, which define both the scope and the coverage of the field.

4. Basic environment statistics can also be viewed as a database, where a statistical framework such as FDES provides the structure and organization to a very large amount of environmental and related socio-economic data. In general, frameworks do not provide direct linkages among activities, pressures and impacts on the environment and social response. They merely serve as reference for developing statistical variables, and as tools of data organization and presentation.

5. *Environmental indicators* are statistics or functions of statistics that have been determined to be particularly relevant for environmental policy. They are a subset or combination of the basic environment statistics described above. The information carried by environmental indicators is usually broader than that which is directly associated with any particular statistical variable. For instance, the ratio of protected over total land area is an indicator of the national effort in conservation of natural systems. More compound indices of air and water quality are weighted combinations of ambient concentrations of different pollutants. Both basic environment statistics and environmental indicators are typically presented in loose frameworks such as FDES.

6. *Environmental accounting* seeks to incorporate environmental concerns about natural wealth and its depletion and degradation into the more rigorously defined system of national accounts. Such a statistical system not only determines the scope and coverage of the interaction between the environment and the economy, but also provides definitions for environmental stock and flow data included in the extended accounting system. For example, depletion of natural resources or degradation of environmental media from pollution is defined consistent with fixed capital consumption as the permanent loss of environmental (source and sink) functions. Both physical and monetary environmental data are recorded in this manner.

Methodological work

7. There are no comprehensive international recommendations on the concepts and methods of environment statistics. The Economic Commission for Europe (ECE) developed standard international

classifications for the collection and presentation of environment statistics. The Organisation for Economic Cooperation and Development (OECD) and the Statistical Office of the European Communities (Eurostat) are now also using some of these classifications. The above-mentioned FDES was developed and published in 1984 by the United Nations Statistics Division and was endorsed by the Statistical Commission in 1985. As FDES does not specify statistical variables or indicators, the United Nations Statistics Division prepared two publications,[b] entitled *Concepts and Methods of Environment Statistics: Statistics of the Natural Environment — A Technical Report* and *Concepts and Methods of Environment Statistics: Human Settlements Statistics — A Technical Report*, which list a large number of variables and indicators and present classifications and methods of data collection. Their purpose is to facilitate the identification and selection of statistical series for national and international data collection. OECD's methodological work is reflected in its questionnaires on the state of the environment based on a pressure-state-response framework. Eurostat is currently working on integrating environmental aspects into sectoral and business statistics and on standardizing reporting on certain fields of environment statistics.

8. Proposals for environmental indicators and indicators of sustainable development have proliferated in the wake of the United Nations Conference on Environment and Development. The idea is to select and summarize environmental, socio-economic and institutional statistics by means of indicators and indices that can be readily used in planning, and policy formulation and evaluation. Various attempts have been made to develop a common framework and agreed upon lists of indicators of sustainable development. The United Nations Statistics Division worked closely with the Division for Sustainable Development of the Department of Economic and Social Affairs of the United Nations Secretariat in developing a framework and a set of indicators. As a result of a participatory and coordinative process, involving a large number of United Nations organizations, other intergovernmental organizations, non-governmental organizations and national representatives, the indicators are now part of a work programme approved by the Commission on Sustainable Development. The Division for Sustainable Development published the report *Indicators of Sustainable Development: Framework and Methodologies*,[c] which contains "methodology sheets" for each of the proposed indicators of sustainable development. These indicators are currently being tested in several countries from all regions of the world.

9. The United Nations Statistics Division developed a list of environmental indicators in collaboration with the Intergovernmental Working Group on the Advancement of Environment Statistics (IGWG). These indicators represent a subset of the broader list of sustainable development indicators of the work programme of the Commission on Sustainable Development. The Statistical Commission, at its twenty-eighth session, approved the use of this list for international data compilation by the United Nations Statistics Division. The appendix contains the list with information on data source, coverage and periodicity. The United Nations Statistics Division is also preparing a manual of environment statistics and indicators that will present concepts, definitions, classifications, descriptions of data sources, tabulations and data uses for the indicators specified by IGWG. The manual will be published in 1999.

10. The World Bank is currently working on a framework for indicators of sustainable development for rapid assessment, and also on indicators that describe special fields of environmental pressures, state and performance. OECD has developed a core set of environmental indicators for regular data collection, together with sets of environment-related "sectoral" (for example, transport-, energy-, agriculture-environmental) indicators. Eurostat is working on the development of pressure indicators and indices and on operational methods for indicators of sustainable development.

11. In the field of integrated environmental and economic accounting, substantial methodological developments have taken place since the United Nations Statistics Division published *Integrated Environmental and Economic Accounting: Handbook of National Accounting* (SEEA)[d] in 1993. In collaboration with the London Group on Environmental Accounting,[e] the United Nations Statistics Division is currently revising the System of integrated Environmental and Economic Accounting (SEEA) to include new methodological developments, in particular in non-monetary (physical) accounting. Draft work in progress will be put on the Internet in order to facilitate the early involvement in the SEEA revision process of developing countries, non-governmental organizations and other international organizations. The United Nations Statistics Division will also publish an operational manual on the compilation of SEEA in early 1999. The manual has been prepared in collaboration with the Nairobi Group[f] and has been sent to a large number of experts in the field for their review.

International data compilation

12. The United Nations Environment Programme (UNEP) publishes biennially the *Global Environment Outlook* (GEO) which reviews the state of the world's environment. The principal focus of GEO–1[g] was a review of major environmental issues from a regional perspective, and an initial evaluation of policy responses that address regional priority concerns. UNEP is in the process of developing GEO–2. The World Bank published *World Development Indicators, 1997*,[h] which contains selected environmental data tables obtained from secondary sources. OECD and Eurostat have developed and use joint questionnaires; data on OECD member States are published biennially by OECD as *OECD Environmental Data*.[i] Eurostat prepares a yearbook of *Environment Statistics*,[j] operates a database and is in the process of widening the geographical coverage of data collection to include Central and Eastern European countries.

13. The United Nations Statistics Division initiated the first international compilation of environmental indicators from non-OECD countries, which has been closely coordinated with OECD. For the development of its questionnaire the United Nations Statistics Division used the OECD model, and modified it in terms of both length and complexity, so as to adapt it to the needs and statistical capacities of developing countries and economies in transition. Similar cooperative arrangements will be made with the specialized agencies, secretariats of international conventions and other international organizations for indicators that are already available to these organizations. The results of the data compilation will be presented in a compendium on environmental indicators planned for publication in 1999.

Coordination

14. In the areas of environmental statistics, indicators and accounting, a multitude of approaches, systems and methodologies have been developed, mostly in response to different user needs. In recognition of this situation and in response to the ACC Subcommittee's consideration at its thirty-first session that there was a special need for coordination in the area of environment statistics, the Secretariat prepared a note on the problems, possible actions and expected results (see annex I). The note identifies problem areas of coordination and proposes actions to address these problems. Significant steps have now been taken towards harmonization through collaborative initiatives like the revision of the SEEA, and the joint OECD/United Nations Statistics Division compilation of environmental indicators.

15. However, given the experimental nature of many aspects of environment statistics, it would be premature to aim at full harmonization, coordination and standardization of environment statistics. More experience needs to be gathered through workshops and comparative research, using different forums and media such as the City Groups, the Intergovernmental Working Group on the Advancement of Environment Statistics, regional seminars and electronic means of exchanging information. In the view of the Secretariat, coordination in the field of environment statistics is at a satisfactory level, consistent with the experimental nature of environment statistics and the large range and variety of user needs for environmental information.

Points for discussion

16. The Statistical Commission may wish to:

(a) Comment on the work programmes of international agencies as indicated in the present discussion;

(b) Consider the suggestion of the ACC Subcommittee on Statistical Activities, at its thirty-second session, that the Task Force on Environment Statistics was no longer necessary and that sufficient coordination could be undertaken in the Subcommittee itself.

Notes

[a] Statistical Papers, No. 78 (United Nations publication, Sales No. E.84.XVII.12).

[b] Studies in Methods, No. 57 (United Nations publication, Sales No. E.91.XVII.14) and Studies in Methods, No. 51 (United Nations publication, Sales No. E.88.XVII.18).

[c] United Nations publication, Sales No. E.96.II.A.16).

[d] Studies in Methods, No. 61 (United Nations publication, Sales No. E.93.XVII.12).

[e] The London Group consists of national accountants from Australia, Canada, Denmark, Finland, France, Germany, Italy, Japan, the Netherlands, Norway, Sweden, the United Kingdom of Great Britain and Northern Ireland, the United States of America, Eurostat, OECD, the World Bank and the United Nations Statistics Division.

[f] The Nairobi Group consists of experts from international organizations (UNEP, Eurostat, World Conservation Union (IUCN), the World Bank, the United Nations Statistics Division), non-governmental organizations (World Wide Fund for Nature (WWF)) and national government offices.

[g] New York, Oxford University Press, 1997.

[h] Washington D.C., World Bank, 1997.

[i] Publication data for 1997 edition: Paris, OECD, 1997.

[j] Publication data for 1997 edition: Luxembourg, Eurostat, 1997.

Appendix

Data sources for indicators

Indicators	*Source*	*Source type*	*Coverage*	*Number of countries or areas*	*Periodicity*	*Latest year*	*Notes*
				Water			
1. Access to safe drinking water	WHO	IO	N	91	A	1995	Reproduced in the forty-second edition of the *Statistical Yearbook* (United Nations publication, Sales No. E.97.XVII.1)
2. Acidification of freshwater bodies	CCIW	NA	N	58	3Y	1995	
3. Concentration of cadmium	CCIW	NA	N	58	3Y	1995	
4. Concentration of faecal coliform	CCIW	NA	N	58	3Y	1995	
5. Concentration of lead	CCIW	NA	N	58	3Y	1995	
6. Concentration of mercury	CCIW	NA	N	58	3Y	1995	
7. Concentration of pesticides	CCIW	NA	N	58	3Y	1995	
8. Renewable water resources	UNSD	IO	N		A		First attempt at data collection via UNSD questionnaire
9. Water abstraction	UNSD	IO	N		A		First attempt at data collection via UNSD questionnaire
10. Water supply by activity categories	UNSD	IO	N		A		First attempt at data collection via UNSD questionnaire
11. Water quality of selected rivers (biochemical oxygen demand, chemical oxygen demand (BOD, COD))	UNSD	IO	N		A		First attempt at data collection via UNSD questionnaire
12. Water quality of selected lakes (BOD, COD)	UNSD	IO	N		A		First attempt at data collection via UNSD questionnaire
13. Waste-water treatment	UNSD	IO	N		A		First attempt at data collection via UNSD questionnaire
				Air			
14. Emission of sulphur dioxide (SO_2)	UNSD	IO	N		A		First attempt at data collection via UNSD questionnaire
15. Emission of nitrogen dioxide (NO_2)	UNSD	IO	N		A		First attempt at data collection via UNSD questionnaire
16. Ambient concentration of SO_2	UNSD	IO	N		A		First attempt at data collection via UNSD questionnaire
17. Ambient concentration of NO_2	UNSD	IO	N		A		First attempt at data collection via UNSD questionnaire
18. Ambient concentration of suspended particulate matter (SPM)	UNSD	IO	N		A		First attempt at data collection via UNSD questionnaire
19. Ambient concentration of ozone (O_3)	GEMS	IO	N		A		
20. Ambient concentration of carbon monoxide (CO)	GEMS	IO	N		A		

Indicators	*Source*	*Source type*	*Coverage*	*Number of countries or areas*	*Periodicity*	*Latest year*	*Notes*
21. Consumption of chlorofluorocarbons (CFCs)	OS/UNEP	IO	N		A		Data available for most countries as part of reporting obligations to the Montreal Protocol on Substances that Deplete the Ozone Layer
22. Emission of methane (CH_4)	UNFCCC	IO	N	38	A		
23. Emission of CO_2	CDIAC UNFCCC	NA IO	N	38	A		
24. Emission of dinitrogen oxide (N_2O)	UNFCCC		N	38	A		
25. Weather and climate conditions	WMO	IO	N	38	A		
Land/soil							
26. Land use	UNSD	IO	N				First attempt at data collection via UNSD questionnaire. Part of data available through FAO
27. Change in land use	UNSD	IO	N				First attempt at data collection via UNSD questionnaire
28. Land degradation: soil erosion	UNSD	IO	N				First attempt at data collection via UNSD questionnaire
29. Use of fertilizers	FAO	IO	N	178	A	1996	Fertilizer Yearbook
30. Use of agricultural pesticides	FAO	IO	N		A		
Natural disasters							
31. Total casualties	UNSD	IO	N		As occurs		First attempt at data collection via UNSD questionnaire
Human settlements							
32. Percentage of population in urban areas	United Nations	IO	N	200	A	1996	*Population Division of the United Nations Secretariat: World Urbanization Prospects: The 1996 Revision* (United Nations publication, Sales No. E.98.XIII.6)
33. Rate of growth of urban population	United Nations	IO	N	200	A	1996	*Population Division of the United Nations Secretariat: World Urbanization Prospects: The 1996 Revision*
34. Percentage of population with sanitary services	WHO	IO	N	91			Reproduced in the forty-second edition of the *Statistical Yearbook*
35. Area and population of urban informal settlements	UNCHS	IO					
36. Motor vehicles production	UNSD		N	30	A	1995	*Industrial Commodity Statistics Yearbook*, 1996 issue (United Nations publication, Sales No. E/F.98.XVII.17)
Waste							
37. Exports of hazardous waste	SBC	IO	N	20	A	1995	
38. Imports of hazardous waste	SBC	IO	N	11	A	1995	
39. Municipal waste disposal	UNCHS	IO					

Indicators	*Source*	*Source type*	*Coverage*	*Number of countries or areas*	*Periodicity*	*Latest year*	*Notes*
			Biological resources				
40. Annual round-wood production	FAO	IO					Forest Products Yearbook (coniferous, non-coniferous)
41. Catches of marine species (marine fishing areas)	FAO	IO	N		A	1995	
42. Deforestation rate	FAO	IO	N				
43. Forest inventory	FAO	IO	N	179	A	1990	Forest Resources Assessment, 1990
44. Fuelwood consumption per capita	UNSD/FAO	IO	N	150	A	1995	Energy Statistics Yearbook, Forest Products Yearbook
45. Forest area as percentage of total land area	FAO	IO	N	206	A	1995	Reproduced in the forty-second edition of the *Statistical Yearbook*
46. Reforestation rate	FAO	IO					
47. Threatened, extinct species	WCMC	NG	N	214		1996	Reproduced in the forty-second edition of the *Statistical Yearbook*
			Mineral resources				
48. Energy consumption	UNSD	IO	N	150	A	1995	Energy Statistics Yearbook
49. Extraction of mineral resources	UNSD	IO	N		A	1996	*Industrial Commodity Statistics Yearbook*, 1996 issue
50. Depletion of mineral resources							

Note: The following abbreviations have also been used in the appendix:

Source

WHO	World Health Organization
CCIW	Canada Center for Inland Waters
UNSD	United Nations Statistics Division
GEMS	Global Environmental Monitoring System
OS/UNEP	Ozone secretariat/United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change
CDIAC	Carbon Dioxide Information Analysis Center
WMO	World Meteorological Organization
FAO	Food and Agriculture Organization of the United Nations
UNCHS	United Nations Centre for Human Settlements (Habitat)
SBC	Secretariat of the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal
WCMC	World Conservation Monitoring Centre

Source type

IO	International organization
NA	National agency
NG	Non-governmental organization

Coverage

N	National

Periodicity

A	Annual
3Y	Triennial